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Ground Weapons and Weapon Systems, USSR

# Basic Imagery Interpretation Report

Engineering Dimensions of the SA-3 GOA Missile

## Secret

RCS

24/5007/71

DATE

October 1970



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### CENTRAL INTELLIGENCE AGENCY Directorate of Intelligence Imagery Analysis Service

INSTALLATION OR ACTIVITY NAME				COUNTRY		•
Engineering	Dimensions of the SA-3 GG	A Missile		UR		
UTM COORDINATES	GEOGRAPHIC COORDINATES NA	BE NUMBER NA	COMIR	EX NO.	NIETB NO. NA	25X1
MAP REFERENCE						
NA						
LATEST IMAGERY USED		NEGATION DATE (If required)				-
Moscow Parade Photography, November 1969		NA				_

#### ABSTRACT

This report presents detailed engineering dimensions of the SA-3 GOA surface-to-air missile. The dimensions were derived from photography of the missile in the Moscow parades. Because of the advanced mensuration techniques used, the dimensions in this report are considered to be more accurate than any previously obtained for the SA-3 missile.

#### INTRODUCTION

The dimensions for the SA-3 provided in this report are shown on engineering drawings of the missile and missile components. Figure I provides selected photographic views of the missile. Overall dimensions are shown in Figures 2 and 3 and dimensions of the individual components of the missile are in Figures 4-10.

All mensuration in this report was performed by the NPIC Photogrammetry Division using the Moscow Metrical Trap and NPIC's Resection, Motion, and Shape reduction programs.

Linear dimensions shown are considered accurate to within plus or minus two percent or 0.05 feet, whichever is greater. Angular measurements are considered accurate to within plus or minus one degree.

NOTE: This report is published as an interim Basic Imagery Interpretation Report with concurrence of the USAIIC.

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FIGURE 1. SELECTED VIEWS OF THE GOA MISSILE, MOSCOW PARADE PHOTOGRAPHY.

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RIGHT SIDE VIEW

SCALLE V\* = 1\*

FIGURE 2. GOA MISSILE, LEFT AND RIGHT SIDES.

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Dimensions in Feet Accuracy: Lifear distance+2% or 0.05 ft, whichever is greater; angles+one degree,

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DIAMETERS MEASURED AT 0.5' INTERVALS FROM NOSE OF MISSILE MISSILE BODY SCALE 1" = 1"

FIGURE 3. GOA MISSILE, TOP VIEW AND MISSILE BODY DIMENSIONS.

TOP VIEW

1235

1034

TOP VIEW

0354

1137

1130

1131

1132

1133

1134

11354

333 399 ... 113 ... 113 ... 113 ... 113 ... 113 ... 113 ... 114 ... 115 ... 115 ... 116 ... 117 ... 118 ...

> SIDE VIEW BOOSTER FIN SCALE 2" = 1"

FIGURE 5. GOA MISSILE, UPPER LEFT WING AND BOOSTER FIN.
-7-

SIDE VIEW
UPPER LEFT WING
SCALE 2" = 1"

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FRONT VIEW

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FIGURE 6. GOA MISSILE, BOOSTER AND REAR VIEW E-E.

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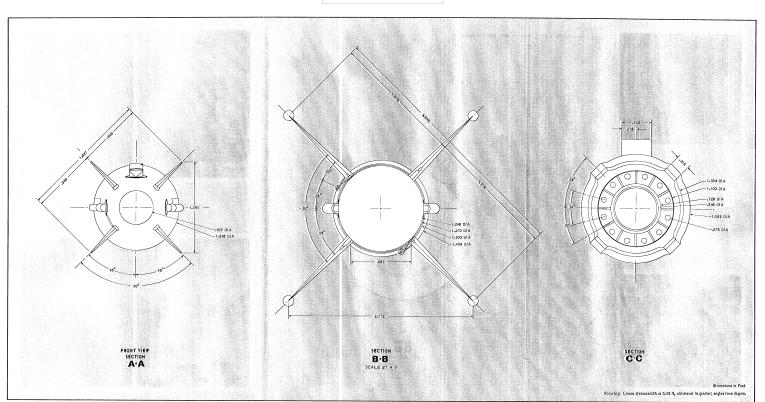


FIGURE 7. GOA MISSILE, SECTIONAL VIEWS A-A, B-B AND C-C.

-9-SECRET

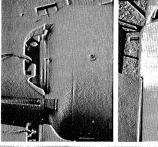
25X1

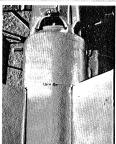
SECTION
D.D.
SCALE 21 = 11

4.943

FIGURE 8, COA MISSILE, SECTIONAL VIEW D-D.

1-525 OIA
1-525

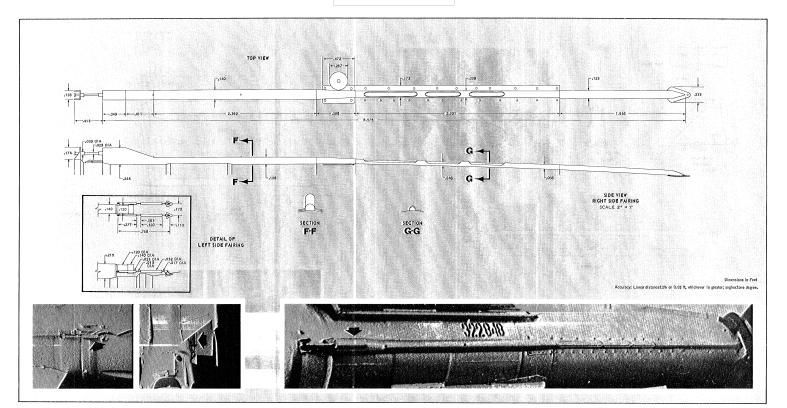




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FIGURE 9. GOA MISSILE, RIGHT SIDE FAIRING AND DETAIL OF LEFT SIDE FAIRING.  $-|\ | -$ 



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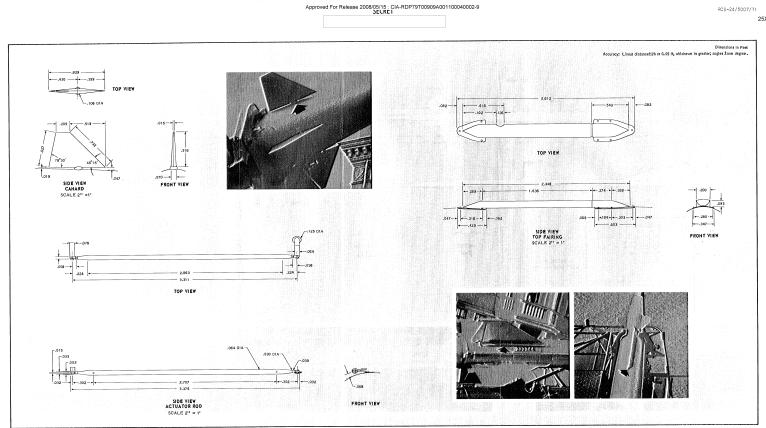


FIGURE 10. GOA MISSILE, CANARD, TOP FAIRING AND ACTUATOR ROD.

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Requirement			
C-S19-85,946			

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